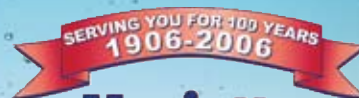


# ANNUAL WATER QUALITY REPORT

*Water testing performed in 2005*



**Marietta**  
 **Water**

PWS ID#: GA0670005

## Continuing Our Commitment

Marietta Water proudly presents our annual water quality report. This report provides you with a summary of our drinking water quality and covers all testing completed from January through December 2005. After reading it, we hope you will better understand where your water comes from and how the water is protected, treated, and tested before you drink it. You will find that Marietta Water delivers water to you that exceeds federal drinking water standards established by the U.S. EPA. Water is important to all of us--its availability, its quality and its use. Marietta Water is committed to providing our consumers with high quality water and with excellent customer service. You are a customer of an award winning utility. We are proud to announce our latest accomplishments.

For more information about this report, or for any questions relating to your drinking water, please call Tim Marshall, Environmental Compliance Coordinator, at (770) 794-5229.

## Community Participation

Marietta Water operates under the supervision of the Board of Lights and Water (BLW). The Marietta BLW is a nonprofit, municipally owned utility with 180 employees. The organization is governed by a seven-member board of directors comprised of community members appointed by the Marietta mayor and city council. The board was formed in 1906 and is celebrating its 100-year anniversary. You can make an appointment to voice comments or concerns to the board on water related issues by calling the board manager at (770) 794-5109. The board meets the Monday before the second Wednesday of each month. Marietta Water maintains regular operating hours of Monday through Friday, 7:00 a.m. to 4:00 p.m. To reach the service and maintenance department 24 hours a day, please call (770) 794-5230.

**THE GEORGIA ASSOCIATION  
OF WATER PROFESSIONALS  
(GAWP) SELECTED  
MARIETTA WATER AS THE  
2005 WATER DISTRIBUTION  
SYSTEM OF THE YEAR  
WINNER! A SCORE OF 94.6  
WAS ATTAINED.**

## Celebrate 100 Years

We at Marietta Water are proud to be celebrating our 100th anniversary this year, providing you, our customers, with 100 years of service. 100 years of growth. 100 years of dependability.

During 2006 Marietta Water will commemorate this important milestone by remembering our proud history, highlighting our growth and accomplishments, and expressing our vision for -- and confidence in -- a very bright future. The indefinable "sense of community" that has long characterized Marietta has been enhanced by the presence of its hometown utility. Our board and employees are your friends and neighbors. We shop at the same stores and worship at the same churches. Our children attend the same schools and play on the same teams. We, like you, love our community and are committed to its continued growth and prosperity.

Located on North Marietta Parkway, we are convenient and accessible.

We value our many customers -- residential and corporate -- who have been a major part of our continued success. We were excited to begin the 21st century with you, and we look forward to serving this community into the century that will follow.

## Where Does My Water Come From?

**M**arietta Water purchases water from the Cobb County-Marietta Water Authority (CCMWA), a public utility founded in 1951. The CCMWA treatment facilities are supplied from two separate surface water sources. The James E. Quarles Treatment Facility, built in 1953, withdraws water from the Chattahoochee River. The Quarles plant undergoing expansion will treat a maximum of 84 million gallons of water a day. This water is distributed and utilized on the eastern side of Cobb County and Marietta. The Hugh A. Wyckoff Treatment Facility, put online in 1966, withdraws water from Lake Allatoona. Lake Allatoona is a Corps of Engineers impoundment in north Cobb, south Cherokee and south Bartow counties. This manmade, multi-use lake is part of the Etowah River Basin. The Wyckoff plant can treat a maximum of 72 million gallons of water a day. This water is distributed and utilized on the north and west side of Cobb County and Marietta.



**M**ARIETTA WATER WINS THE GAWP 2005 BEST CONSUMER CONFIDENCE REPORT AWARD IN THE LARGE SURFACE WATER SYSTEM CATEGORY! MARIETTA WATER EDGED OUT 15 OTHER MUNICIPALITIES IN THEIR CATEGORY TO TAKE THE FIRST PLACE FINISH.

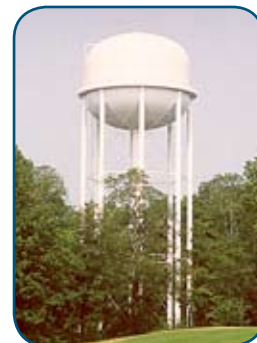
## Source Water Assessment

**D**uring 2002, the CCMWA and the Atlanta Regional Commission completed a source water assessment itemizing potential sources of water pollution to our surface drinking water supplies. This information can help you understand the potential for contamination of your drinking water supplies and can be used to prioritize the need for protecting drinking water sources.

A source water assessment is a study and report that provides the following information: identifies the area of land that contributes the raw water used for drinking water; identifies potential sources of contamination to drinking water supplies; and provides an understanding of the drinking water supply's susceptibility to contamination.

Individual source pollution involves actual facilities, which have contaminants on site that can pose a potential health risk if humans consume those contaminants. Nonpoint source pollution is caused by development and by everyday activities that take place in residential, commercial and rural areas; nonpoint source pollution is carried by rainfall to streams and lakes. After evaluating these sources of pollution, the report found the Chattahoochee watershed susceptibility ranking to be *high* and the Lake Allatoona watershed susceptibility ranking to be *medium*.

For more information on this project, visit the source water assessment Web site at [www.atlantaregional.com/swap/](http://www.atlantaregional.com/swap/), or you can request information by mail from the Environmental Planning Division, Atlanta Regional Commission, Attn: Matthew Harper, 40 Courtland Street NE, Atlanta, GA 30303.





## Substances That Might Be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

**Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;

**Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.



**YOU CAN DO YOUR PART TO CONSERVE WATER BY FOLLOWING THE CURRENT STATEWIDE PRE-DROUGHT, OUTDOOR WATERING RESTRICTIONS:**

- Odd-numbered addresses may water only on Tuesdays, Thursdays and Sundays (no hourly limits).
- Even-numbered or unnumbered addresses may water only on Mondays, Wednesdays and Saturdays (no hourly limits).

## Why Does My Water Have an Offensive Odor?

Our first question to you is, do you have new carpet, curtains, wallpaper, etc.? If so, the chemicals from the renovation materials may be mixing in the air with the disinfectant that the water authority uses to give its customers safe drinking water. The CCMWA uses chlorine dioxide gas as a disinfectant at the water treatment plant. It is an excellent disinfectant, but it can cause harmless, short-term tastes or odors that are detectable by some consumers.

When a water tap is opened, small amounts of chlorine dioxide diffuse into the air and combine with existing household odors. All homes have volatile organic compounds (VOCs) in the ambient air produced by scented products, cleaning agents, paint, carpet, furnishings, fresh flowers or wreaths, and many other common household items. The VOC/chlorine dioxide combination odors have been described as smelling like fuel oil, kerosene, chemicals, or cat urine, to name the most common. Studies have not identified any health concerns associated with this.

The strongest odors are generally associated with installing new carpet. The odor will continue until the level of VOCs decrease (new smell goes away). This can take a few weeks to several months depending on the type of materials used and the amount of ventilation. Opening windows and turning on fans will help to eliminate the odors more quickly. Alternatively, you can remove chlorine dioxide and other chlorine compounds from the water by using an activated carbon filter. This will prevent the formation of compounds causing unpleasant tastes or odors.



## Cryptosporidium and Giardia in Drinking Water

The CCMWA participated in a major drinking-water-quality testing program called the Supplemental Information Collection Rule (SICR). Two of the contaminants tested for under this rule are the parasites *Cryptosporidium* and *Giardia*, which have caused outbreaks of intestinal disease in the United States and abroad. These parasites are common in surface water and are very difficult to kill. Even a well-run water system may contain some live oocysts (in the case of *Cryptosporidium*) or cysts (in the case of *Giardia*). The U.S. EPA is working to resolve several scientific issues that will allow it to set *Cryptosporidium* and *Giardia* safety standards. Our 1999 testing, performed at the raw (untreated) water intake on the Chattahoochee River, located immediately north of the Johnson Ferry Road crossing, revealed the presence of *Cryptosporidium* and *Giardia* in several months' samples. These organisms were detected in the water prior to treatment. During 1999, the water at Lake Allatoona was also tested. No oocysts or cysts were detected.

In order to comply with an upcoming federal regulation, the CCMWA has been monitoring for *Cryptosporidium* and *Giardia* in the raw water from both its water sources, the Chattahoochee River and Lake Allatoona. This monitoring was performed monthly during 2005. No *Cryptosporidium* oocysts were detected at either source. *Giardia* cysts were detected in two of the twelve samplings. Again, these organisms

were detected in the water prior to treatment and only at the Chattahoochee River intake. Our treatment technique is designed and optimized to remove these contaminants. Therefore, no precaution about our drinking water is currently needed for the general public. See advice about special populations and a source for further information in the Special Health Information section.



## Table Definitions

**AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable

**ND:** Not detected

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

## Sampling Results

During the past year we have taken thousands of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. Every regulated contaminant that we detected in the water, even in the minutest traces, is listed here. Although all of the substances listed are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

REGULATED SUBSTANCES							
SUBSTANCE (UNITS)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm) <sup>1</sup>	2005	(4)	(4)	2.08	ND-2.08	No	Water additive used to control microbes
Chlorite (ppm)	2005	1	0.8	0.38	0.09-0.38	No	By-product of drinking water disinfection
Fluoride (ppm)	2005	4	4	2.36	0.7-2.36	No	Erosion of natural deposits; Water additive which promotes strong teeth
HAAs [Haloacetic Acids] (ppb)	2005	60	0	35.9	8.6-46.3	No	By-products of drinking water disinfection
Nitrate (ppm)	2005	10	10	0.49	0.3-0.49	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliform Bacteria (% positive samples)	2005	5% positive monthly samples	0% positive monthly samples	1.4	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2005	TT	NA	2.20	1-2.2	No	Decay of organic matter in the water withdrawn from sources such as lakes and streams
TTHMs [Total Trihalomethanes] (ppb)	2005	80	0	69.9	12.3-98.4	No	By-products of drinking water disinfection
Turbidity (NTU) <sup>2</sup>	2005	TT=1 NTU	0	0.21	ND-0.21	No	Soil runoff
Turbidity (lowest monthly % of samples meeting the limit) <sup>2</sup>	2005	TT=95% of samples <0.3 NTU	0	100	NA	No	Soil runoff
Tap water samples were collected for lead and copper analyses from 50 homes throughout the service area							
SUBSTANCE (UNITS)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH%TILE)	HOMES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2005	1.3	0	0.03	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2005	15	0	7	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup>Detection limit for chlorine is 0.05 ppm. Disinfection was confirmed by heterotrophic plate count. This is a method that measures total bacteria in a sample. The result was within acceptable limits.

<sup>2</sup>Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.